

wknd | lifestyle

Toyland is changing

Dense jungles, tiny nurseries, math that merges with chemistry and magic — India's newest toy startups are succeeding at learning made fun, and they've seen a boom in the pandemic

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The mystery of the box is something parents have witnessed and experienced, usually to their amusement and frustration, for generations. It can be phrased as a simple statement. You can spend all you can (and sometimes more than that) on a gift for a child, only to find they are more interested in the box.

The truth is, few games and toys offer a creative child the blank slate that the cardboard box affords. Is it a fort? Can I climb in? Draw on it? Turn it upside down to make a drum?

"A good toy is one that is simple, can be taken apart and put back together... It's no wonder that the most successful toy in the world is the LEGO brick," is how Arvind Gupta, a Padma Shri awardee, toy scientist and inventor, puts it.

Of course, no child wants a room full of cardboard boxes. The kingdom of toys, in fact, follows a Linnaean taxonomy — kingdom, phylum, class, order, family, genus, species. For instance, here's how Scrabble would break up. Kingdom: games; phylum: physical games; class: multiplayer; order: board games; family: games of skill; genus: word games; species: scrabble. You can do the same for anything — from drones to dolls.

It's a market valued at \$1.23 billion in India as of 2020, according to the Indian Toys Market 2021-26 report by market research group IMARC. Within that market, a rash of new startups has set up shop, aiming to bridge the gap between cardboard box and jungle gym,

textbook and card game, wildlife safari and board game. In a time of no jungle gyms, no friends to play cards with and no possibility of a wildlife safari, these companies have seen demand boom.

Because what do you do when you have to work from home and your child's bored and shut in too? You can get them a board game that lets them roll the dice in 13th-century India, to strategise with kings as Muhammad Ghori prepares to invade. (That's toy startup Kitki's Rise of the Delhi Sultanate). Or try Bengaluru-based startup Kaadoo's wildlife safari games, where cards help you proceed through sightings or rain keeps you from spotting the rhino.

If your child's a bit younger, you might get Chennai-based Ariro's all-wood play furniture, DIY model kits by Pune-based Funvention, or general knowledge-based card games by Skillmatics that the whole family can play together.

"Both my children have grown up discovering play with open-ended toys such as stackers, blocks and Lego pieces that allowed them to play imaginatively," says Moushmi Prakasham, a mother of two from Mumbai. As her children grew older — they're now seven and four — she says she had to look harder for toys that kept them imagining, creating and guessing. That's when she came upon Kitki online. Her boys love their game Three Sticks, where players must keep building on an existing shape to make new shapes with the sticks they're given.

To them, it's a puzzle. But they're learning while they play and they don't even know it. "Learning then becomes an exercise you look forward to," says Devanshi Kejriwal, co-founder of Skillmatics.

That way, when the kids do look inside the box, they could find that its contents hold out the same kind of promise of excitement and possibility that the box once did.



{ **KAADOO** } NATURE-THEMED BOARD GAMES FOR KIDS 6 AND OLDER

Into the wild: Spot the rhino, escape the dinosaur

Bestselling item:

The Big Game: Nilgiri Biosphere (right) You roll the dice to proceed on your tour of the Nilgiri Biosphere Reserve and encounter some of its most popular and rarest inhabitants. The objective is to "sight" as many wild animals as possible — a leopard on a hunt, a Bengal tiger with her cubs, a Malabar giant squirrel perched in a tree or the majestic Malabar pied hornbill. There are 52 "sighting" cards, and wild cards that hinder or advance your ride. (Price: Rs 899)

The wild forests of the world are packed with so many plants and animals that if you want to learn the names of even a small fraction, you had better start young. That's the logic behind Kaadoo's Big Game series of board games. From the Western Ghats and Gir forest to the African Savannah and Arctic Circle, they help children explore wild ecosystems around the world.

Kaadoo (Kannada for Forest) is the brainchild of Bengaluru-based wildlife photographer and entrepreneur **Diinesh Kumble** (below). He launched it in 2016, with his partners Raviraj Joshi, who drives conceptualisation and design, and Ganesh Subramaniam, who heads the business end.

Kumble was driven by an interest in wildlife conservation. "He figured a good way to communicate and build curiosity about wildlife would be through board games," says Subramaniam. "His subject-matter expertise was the spark. We looked at a few traditional board games to figure how to build something that could incorporate the characteristics of game mechanics — a board, dice and something to make players move around the board."

A wildlife safari was seen as an interesting way to introduce children, and adults, to the beauties of the wild.

Kaadoo was launched with two games: Nilgiri Biosphere and African Savannah. "We positioned them as family games, where parents and kids could spend time together, away from the screen, for half an hour or more," Subramaniam says. The safari pawns are made in Karnataka's traditional wooden-toy-making cluster of Channarayana.

More recently, Kaadoo has also introduced card games, jigsaw puzzles and cooperative games such as Night Hire, where one player is a poacher and must dodge the other players, who represent rangers.

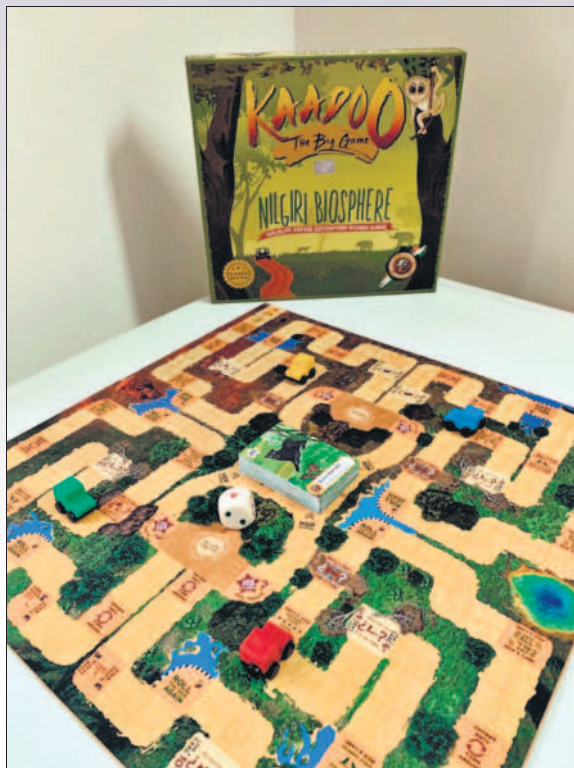
Since Kaadoo sells mainly through brick-and-mortar toy stores in

major cities, business has been hit hard in the pandemic. "We haven't launched any new games in the last year," says Subramaniam. And they've had to downsize a bit. "But we should be back up by November, with new game that explore new ecosystems."

Tasneem Siddique, 34, a businesswoman from Tiruchirappalli, has been buying Kaadoo's games for her nine-year-old son Arham and her five-year-old nephew Farhan, who loves dinosaurs, during the pandemic. The Dino Kingdom board game has been a particular hit with Farhan.

"When there's a dangerous eater coming, the card with tell you to walk backwards and hide in the bushes," he says. "Everybody plays this game with me."

The games claim to help attention span, concentration and goal orientation in children and I have found what they claim to be true, says Siddiqui.



In Nilgiri Biosphere, sighting cards and wild cards can hinder or advance your ride. Kaadoo also makes cricket-themed games, such as Pixoo (left) in which players have to match patterns to form pictures and score runs.



{ **ARIRO** } WOODEN TOYS FOR KIDS UNDER 8

Going against the grain: They neem business

Bestselling item: Pikler triangle

A climbing structure based on one designed a century ago by Hungarian paediatrician Dr Emmi Pikler, it keeps children aged six months to six years occupied while exercising their limbs. It's essentially an inverted V fitted with a ramp with ridges. The structure lets children, climb, crawl, hang and twist about. (Price: Rs 14,000)

tried to find wooden alternatives, but few were locally available. "So we decided to make some," he says.

Vasanth researched designs and Tamilselvan got to work sourcing the wood. They decided to use neem, known to have anti-bacterial and anti-fungal properties, and reached out to a carpenter on simple teething and rattles for their daughter. "Friends began to ask



It's been a great year for Ariro toys, says entrepreneur Vasanth Tamilselvan. The Chennai-based startup was two years old and growing slowly when the pandemic hit. A few months in, business began to soar.

"People were looking for toys and tools to keep their kids engaged and away from electronics while they worked from home. We hit our ten-thousandth sale in October," Tamilselvan says.

Tamilselvan, 36, co-founded Ariro with his wife Nisha Vasanth, 30, a Montessori teacher, two years after their daughter Nakshatra was born. She was their inspiration. When Nakshatra developed a reaction to plastic toys as a baby, the couple



{ **ARVIND GUPTA** } TOY SCIENTIST

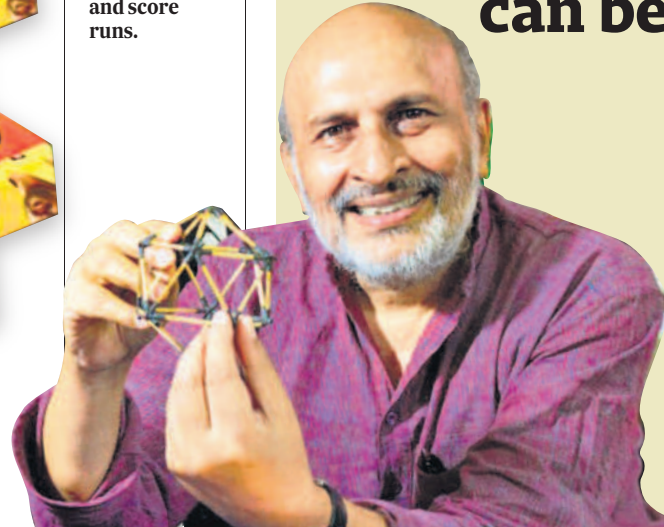
'A good toy is one that can be taken apart'

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He's the sort of toymaker you read about in children's tales. Except he's real. Arvind Gupta, 67, is a toy scientist whose life's work has been to introduce students and teachers across the country to do-it-yourself toys and science models fashioned out of discarded or low-cost material. Gupta was awarded the Padma Shri in 2018, for his unique contribution to education.

"The best thing a child can do with a toy is break it," he says. Because that satiates a child's curiosity about what's going on inside it, and they're bound to learn a few



{ FUNVENTION } DIY KITS FOR KIDS AGED 3 TO 14

Tactile treasures: Fun in the making

Bestselling item: DIY Garden Drip Irrigation Kit

This kit lets kids set up a seed germination stand, with small valves and pipes that form a mechanical drip irrigation system, and growing material. They can plant mustard and other easy-to-grow plants, and monitor activity as the plants germinate and grow. (Price: Rs 892)



Funvention was meant to be a YouTube channel. As kids, brothers **Milind Vadnere (above)** and **Kamlesh Vadnere** loved to build complex models of buildings and structures that they saw around them, using Thermocol, cardboard, bits of wood and other scrap. In 2016, Milind, then a software engineer, and Kamlesh, then a graphic designer, decided to revive that passion by posting DIY or do-it-yourself tutorials on YouTube for kids. “We never started it, because procuring the materials for what we wanted to build was not very easy,” says Milind, now 39. “And if we were having a tough time, we figured kids might just watch, but wouldn’t get to replicate.”

That gave the brothers the idea for their toy company. Funvention now ships kits complete with instructions that allow kids to make their own catapults, drip irrigation systems, models of vehicles and more.

The DIY Garden Drip Irrigation Kit, launched in 2017, was one of their first products. Within months, they had eight DIY model kits, for planes, bikes, chariots etc. You can now also get kits to make your own **toy robot (right)** or



tiny rocket launcher (above). Some of these kits have mechanical moving parts such as levers and axles.

For the first two years, they worked out of Kamlesh’s home in Pune, while keeping their day jobs. They hired sales representatives in Bengaluru, Mumbai and Chennai to liaise with distributors and customers. Then, in 2018, Kamlesh lost his battle with cancer. Determined to nurture their company, Milind quit his job. Funvention now has more than 100 DIY products in its portfolio. “Sales have doubled in the last six months,” Milind says. “Parents were looking for ways to occupy their kids, and our products do that for hours at a time.” The models, in fibreboard, ply and paper, also offer a great surface for painting and decoration.

Anuja Rajput, 29, has taken to buying Funvention kits for her six-year-old niece Preet. “I found this concept of smart activities very interesting,” she says. “Her mother tells me Preet really enjoyed building and playing with the drip irrigation kit. It gave her such a sense of responsibility, she would sometimes interrupt TV time so she could take care of her plants.”



{ SKILLMATICS } LEARNING GAMES FOR PEOPLE OVER 3

Brain gains



Bestselling item: Guess in 10

A modified version of 21 Questions, it aims to teach players about different animals, cities, sports, countries etc. Each player takes turns trying to get the other players to guess what’s on the card they’re holding. The others can ask up to 10 questions, to be answered with a yes or a no. There are wild cards and clue cards too. (Price: Rs 350)

Five years ago, **Dhvanil Sheth (below)**, then 26, was spending some time with his nephews when he was struck by how early children were taking to screens. His younger nephew, just three years old, even tried to use his finger to scroll up the page of a physical book. “That’s when we realised that this sector had great potential,” says his business partner **Devan-shi Kejriwal, 24 (below)**.

She had a degree in finance and operations, he was a management consultant. They put their heads together and after a year of brainstorming and setting up of operations, launched Skillmatics in 2017. Their first products were a series of wipe-and-write activity mats on different themes — space, animals, languages. “These are like textbook exercises, but they don’t feel like homework,” says Kejriwal. “The interface is like a tablet screen, it’s colourful and fun.”

Skillmatics’ products are the result of intense market research. “We don’t go with intuition,” says Kejriwal. A data analysis team studies what consumers are looking for. Product testing is monitored by a team of consulting child psychologists, teachers and product developers.

“Guess in 10 was developed when we picked up on insight that consumers were looking for travel-friendly games that were compact and easy to store,” says Kejriwal. “We also noticed the action of guessing is popular, as is the buying and selling (in Monopoly).”

Skillmatics also uses algorithms to name and position games. In 2019, it became the first Indian company to be stocked globally by Hamleys, the iconic toy store company now owned by Reliance Industries.

Their latest game, launched in January, is called Train of Thought and was developed to help children and adults communicate better. It’s an attempt to get children and parents to dig deep, together.

“It’s very rare that a parent gets to answer questions like, if I had a superpower, what would it be, or a kid gets to think about what is something I am good at that I could teach someone else,” Kejriwal says. Skillmatics currently has a portfolio of 45 games.



PHOTOS: WIKIMEDIA COMMONS; JTM EXPORTERS; VARANASI.NIC.IN



WATCH Arvind Gupta demonstrate how to make his favourite toy



READ an interview with NID professor Surabhi Khanna on the traditional toys India is rapidly losing

{ TOYS WERE US } TRADITIONAL CLUSTERS...

And where to find them on the map

Almost anything can be a toy, and in India, the range of traditional materials and moulds is immense. Folk toy traditions include animals made from leather, figurines from terracotta, puppets from betel nut and cloth. Done right, these remain some of the most eco-friendly toys possible. The materials were traditionally sourced locally; paints were natural dyes. Sadly, brightly coloured plastic has replaced most of these in the mainstream markets. Where entire villages once flourished by making such toys, now only small clusters survive, their toys sold as souvenirs or collectibles. Take a look at some of the toy-making communities that remain.

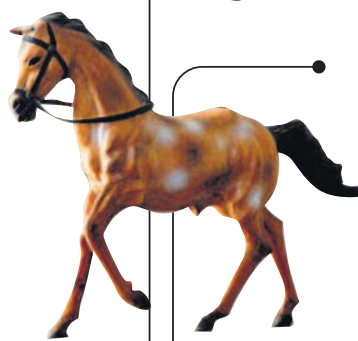


Varanasi, Uttar Pradesh

The artisans in Varanasi will tell you that their forefathers worked in ivory, and were patronised by the Mughals. After ivory was banned in the 1990s, these artisans took up wood carving and turning. They specialise in making complex toys without joints, often representing characters from Hindu mythology.

Leather toys of Indore, Madhya Pradesh

These are miniature animals in various states of motion. There are tigers, horses, elephants and monkeys, hippos, rhinos, giraffes and kangaroos. This tradition uses leather-moulding techniques said to have evolved from taxidermy. Shredded paper moulds bound by wire and thread are covered in sheepskin to give the toys their muscular look.



Krishnanagar, West Bengal

This is the centre of production of the realistic Krishnanagar clay dolls. The clay artisans here are said to have migrated over 250 years ago from present-day Dhaka in Bangladesh, on the summons of an 18th-century chieftain named Krishnachandra. They were later patronised by local zamindars and the British. Traditionally the toys were made by the women and represented social scenes, animals and deities.

Asharikandi, Assam

This craft village is known for making the intricate Hatima doll, a mother with elephant ears, holding two infants. Other popular toys made here are the Ainar horse, elephant, rhino and a host of mythical figures. Business picks up during local festivals and fairs.



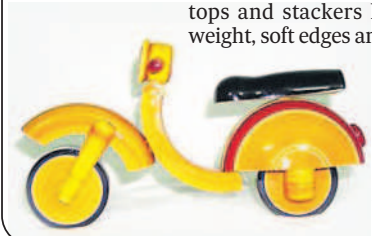
Nirmal, Telangana

Toys in Nirmal were traditionally made using sandalwood and coated with a plant extract that give them their characteristic golden sheen. Crafted by Naqqash artisans said to have roots in Rajasthan, these toys are typically human and mythological characters, as well as animals. The Nirmal paintings and furniture are derived from the same tradition, patronised by a local 17th-century chieftain named Nimma Naidu.



Channapatna, Karnataka

Traditionally fashioned from soft ivory wood, Channapatna toys include rattles, tops and stackers known for their light weight, soft edges and bright colours (from lacquer-based dyes). The Channapatna toys are said to have originated and flourished during Tipu Sultan’s rule, in the 18th century.



Kinnal, Karnataka

Not far from the ancient temple town of Hampi, Kinnal’s toys are exquisite carvings in wood, aided by a host of other materials such as tamarind seeds, pebbles, jute, sawdust and liquid gum used for embossing and ornamentation. The Kinnal artisans’ ancestors are said to have been responsible for the intricate woodwork visible across the 14th century Vijayanagara empire. Kinnal toys typically depicted people in different traditional occupations.



Thanjavur dolls, Tamil Nadu

This is the traditional Indian bobblehead, made from terracotta. These dancing dolls date back to the reign of Thanjavur ruler Sarabhoji II Bhonsle, in the early 19th century. They typically come in male-female pairs. In the roly-poly versions, the centre of gravity is concentrated in the bottom, giving them their oscillating movement.

TEXT: NATASHA REGO

A Pikler triangle (without the ramp) made by Ariro from naturally aged neem wood.

where they could get some too,” Tamilselvan says. That’s when his entrepreneur’s brain kicked in.

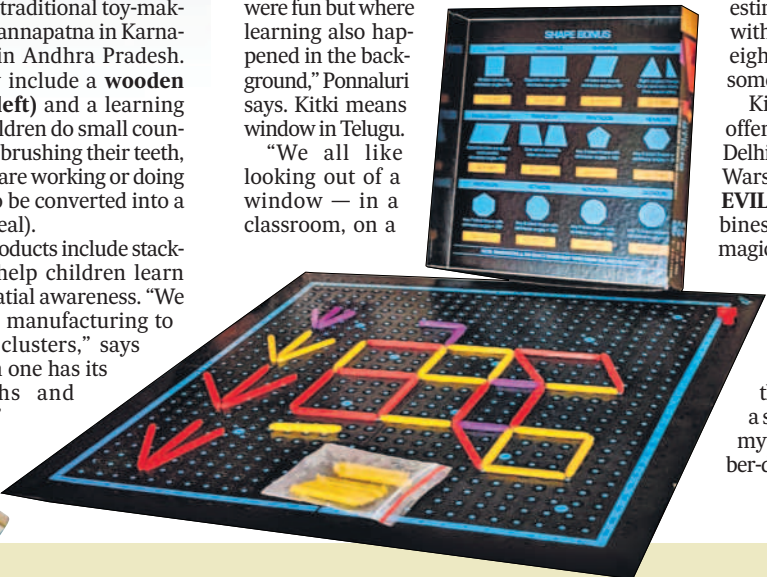
The couple spent the next two years touring Europe and China to learn about materials and the market. Ariro Wooden Toys was born in 2018, with two lines of products, rattles and teethingers, sold online.

“Ariro is the first lullaby sung to babies in Tamil,” says Vasanth. “We wanted to name our company something Indian to represent quality toys made by an Indian brand.”

In the early months, mothers acted as evangelists, posting about the products on social media, and that helped immensely. The Ariro team slowly expanded to include more Montessori teachers to brainstorm on designs. The company has since expanded to a staff of 24, including product and sales managers.

For the actual moulding of many of their toys, Ariro works with traditional toy-making communities in Channapatna in Karnataka and Etikoppaka in Andhra Pradesh. Bestselling items now include a **wooden indoor jungle gym (left)** and a learning tower that lets little children do small counter-based activities like brushing their teeth, next to an adult as they are working or doing chores (which can also be converted into a table and chair for a meal).

Its 16 categories of products include stackers and nesters that help children learn shapes and develop spatial awareness. “We are looking to expand manufacturing to other traditional toy clusters,” says Tamilselvan. “Each one has its own strengths and potential.”



things along the way.

On his website, arvindguptatoys.com, there are thousands of free “recipes” for making toys from scrap. Some, Gupta has collected from his work and travel across the country, others he has made up himself. Anything around the house — from broken CDs to used cartons, straws, cardboard and matchsticks — can be fashioned into a game, puzzle or even a little technological marvel such as a pump, sundial or turbine, he says.

Gupta’s YouTube videos are used in classrooms around the world to teach principles of science through simple experiments that children can enjoy and relate to. So what makes a “good” toy, what should game creators be aiming for, and what’s his own personal favourite? Excerpts from an interview:

What are things a good toy must do?

Toys should be dynamic — fly, spin, jump, roll, make a sound. Dynamic toys interest children much more than static toys. Some of the best and most successful toys are not “blackboxes” where you press a button and some LED lights glow and something shrieks

and makes a loud din. A good toy is one that is simple, can be taken apart and put back together... It’s no wonder that the most successful toy in the world is the LEGO brick, which opens up immense possibilities for a child for further exploration.

In an age of such digital infiltration, can physical toys and games compete with the screen?

There are two cardinal principles of education — from the concrete to the abstract, and from the near to the far. Before children can understand a concept, they need a lot of experience — touching, smelling, listening, putting things together, pulling them apart, working with different materials and learning to manipulate them. All evidence and studies show that digital games will after a point numb the intelligence and good old wooden blocks and build-it-yourself sets are still the best ways to learn.

What were your toys like growing up?

I grew up in the town of Bareilly in Uttar Pradesh. My parents never went to school.

My mother was enlightened and she sent us to the best school in our town. We were poor and could not afford to buy toys, so we tried to make them ourselves with whatever was at hand — old matchboxes, cigarette packs, newspapers, bottle crown caps. I would later study electrical engineering at IIT-Kanpur. I gave up a career in that field in 1978, to work with toys and science.

You’ve said your wife made it possible for you to do this...

People talk about life insurance, but I had wife insurance. My wife Sunita taught in a college and she earned enough for the family. She never made demands of me. I guess I was very lucky to be able to passionately pursue what I wanted to do.

What should we be aiming for as a nation when it comes to toy-making?

India is a huge country and there should be a much huger demand for toys. Unfortunately, because of uneven development and poverty, toys remain out of the reach of millions.